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shown in Figure 5A. Graphics elements may be retrieved on the basis of information referenced in the database, but are not necessarily a part of the database itself. A graphics image such as the "Cypress MicroSystems" logo 500 at the top of Figures 5A, 5B and 5D may be inserted by the stylesheet without reference to the XML formatted data.

Please replace the paragraph beginning at page 25, line 16 with the following:

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The visual output datasheet also displays information not explicitly input using the configuration interface, such as the Blocks Table 508 of Figure 5C and the Global Register Values table 513 in Figure 5E. Other data tables that may be included are the Analog Clocks table 510 and Analog Input MUX table 511 of Figure 5D, and the Analog Buffer Output table 512 of Figure 5E. Also shown in Figure 5A is a file information block 501, containing information regarding the generation of the datasheet file.

VERSION OF AMENDMENTS WITH CHANGES SHOWN:

IN THE SPECIFICATION

Please replace the paragraph beginning at page 4, line 22 with the following:

In an embodiment of the present invention, an integrated design environment for a programmable [system-on-a-chip] integrated circuit stores the descriptions of the modules and devices available for configuration by the designer in a database that is formatted with extensible markup language (XML). The parameterization information is combined with the module and device descriptions to automatically produce a project configuration report. This combination is performed using an extensible stylesheet language (XSL) stylesheet. XSL may be used to transform the XML data into an HTML (hypertext markup language) file that is then rendered by a browser.

Please replace the paragraph beginning at page 7, line 7 with the following:

Figure 1B shows a [device editor] window of an integrated design environment used for user module selection in accordance with an embodiment of the present claimed invention.

Please replace the paragraph beginning at page 7, line 12 with the following:

Figure 1C shows a [device editor] window of an integrated design environment used for user module placement in accordance with an embodiment of the present claimed invention.

Please replace the paragraph beginning at page 7, line 22 with the following:

Figure 1E shows a [device editor] window of an integrated design environment used for specifying device pinout in accordance with an embodiment of the present claimed invention.

Please replace the paragraph beginning at page 12, line 13 with the following:

The computer system 112 of Figure 1A may be used with an integrated design environment (IDE). An example of an IDE is [the Cypress PSoC Designer] PSOC DESIGNER software, available from Cypress MicroSystems, Inc., Bothell Washington. [PSoC Designer] The PSOC DESIGNER integrated design environment contains three subsystems; [Device Editor] a DEVICE EDITOR subsystem for configuring a target device, [Application Editor] an APPLICATION EDITOR subsystem, and [Debugger] a DEBUGGER subsystem. The interface is split into several active windows that differ depending on which subsystem you are in.

Please replace the paragraph beginning at page 12, line 20 with the following:

The [PSoC Designer Device Editor] configuration subsystem of Figure 1B is used for selection, placement and configuration of User Modules. Figure 1B shows a [device editor] configuration interface 120 in selection mode. The [Device Editor] configuration subsystem is the

subsystem in which the bulk of datasheet information is generated. Shown in Figure 1B are a User Module Selection Window 121, User Module Window 122, User Information Windows 123, and a Resource Manager Window 124.

Please replace the paragraph beginning at page 13, line 5 with the following:

In an embodiment of the invention a project begins with the selection of a target device such as the Cypress [Microsystems 8C25122A] MicroSystems CY8C25122A microcontroller. The [8C25122A] CY8C25122A is a member of the CY8C25xxx/26xxx family of [Programmable System-on- Chip (PSoC)] PROGRAMMABLE SYSTEM ON A CHIP or PSOC microcontrollers that replaces many MCU-based system components with one single-chip, programmable device. A single PSOC microcontroller offers a fast core, Flash program memory, and SRAM data memory with configurable analog and digital peripheral blocks in a range of convenient pin-outs and memory sizes. The driving force behind this innovative product comes from user configurability of analog and digital arrays of configurable blocks. These blocks are analog and digital peripheral blocks that are customized by the placement and configuration of User Modules.

Please delete page 13, lines 12-19 in their entirety.

Please replace the paragraph beginning at page 13, line 21 with the following:

The [Device Editor] configuration subsystem interface 120 is used to configure the target device. User Modules (represented by icons) may be selected from the User Module Window 122, which causes an icon to appear in the User Module Selection window 121. In this example a pulse width modulator PWM16_1 125 is shown as selected. Information regarding the PWM16_1 125 is shown in the User Information Windows 123. The Resource Manager Window shows the target device resources that are used by the PWM16_1.

Please replace the paragraph beginning at page 14, line 8 with the following:

Figure 1C shows the [device editor] configuration interface 120 in placement mode, with a Placement Window 130, a Global Resources Window 131, and a User Module Parameters Window 132. User Modules shown in the User Module Selection window 121 are placed in the Placement Window 130. The placement of the PWM16_1 125 is indicated by the two digital blocks 133 and 134 shown in the Placement Window 130. Parameters and resources shown in the Global Resources Window 131 and User Module Parameters Window 132 are available for configuration by the designer.

Please replace the paragraph beginning at page 14, line 19 with the following:

Figure 1D shows the [Device Editor] configuration interface 120 with expanded Global Resources Window 131 and User Module Parameter Window in which resources and parameters have been set. For example, in the Global Resources Window 131, the CPU_Clock has been set with a frequency of 12 MHz and the Sleep Timer has been set with a frequency of 512 Hz. In the User Module Parameters Window the period has been set at 134 and the Pulse Width has been set at 92. The values entered by the designer, in addition to default values, are stored in an XML formatted database.

Please replace the paragraph beginning at page 15, line 4 with the following:

Figure 1E shows a [Device Editor] configuration interface of an integrated design environment used for deploying module connections. Interconnections can be specified on the device in the placement mode of [Device Editor] the configuration subsystem. User Module interconnections consist of connections to surrounding [PSoC] configurable blocks, output bus, input

bus, internal system clocks and references, external pins, and analog output buffers. Multiplexors may also be configured to route signals throughout the [PSoC] block architecture.

Please replace the paragraph beginning at page 15, line 14 with the following:

Referring again to Figure 1E, a Pinout Window 140 and a Pinout Parameters Window 141 are shown. The Pinout window includes a diagram of the pin layout of the target device (e.g., the Cypress [Microsystems 8C25122A] MicroSystems CY8C25122A). The Pinout Window accepts input specifying the connections for the [PSoC] configurable blocks to the pins. In this example, there is only one User Module present, and thus there are no interconnections specified between multiple User Modules. Typically, there may be multiple User Modules with designer specified interconnects which would be stored in the project database. Some interconnects are designer specified, whereas others are generated automatically (e.g., the interconnection of [PSoC] configurable blocks of a selected User Module.)

Please replace the paragraph beginning at page 21, line 1 with the following:

Figures 3A through 3G show an example of a portion of a database formatted in XML in accordance with an embodiment of the present claimed invention. The XML formatted data can be associated with a device such as the Cypress [Microsystems 8C25122A programmable system-on-a-chip (PSoC)and] MicroSystems CY8C25122A PSOC microcontroller and a computer aided design system, e.g., Cypress [Microsystems PSoC Designer] MicroSystems PSOC DESIGNER integrated design environment. The part includes a microprocessor, memory, digital blocks, analog blocks, and 8 pins (6 I/O [pins.)] pins). Examples of the data that may be included in the database are pin-out information, schematics, connectivity, parameters, block information, and signal information. Hardware suitable for use with the present invention is described in a U.S. Patent Application titled "Programmable Microcontroller [Programmable System on A Chip"] Architecture," by W. Snyder,

filed on October 22, 2001; the whole of which is incorporated herein by reference. Additionally, an environment in which the present invention may be practiced is described in U.S. Patent Applications No. 09/972,003 (filed October 5, 2001), No. 09/972,133 (filed October 5, 2001), and No. 09/972,319; which are incorporated herein by reference.

Please replace the paragraph beginning at page 21, line 22 with the following:

The hierarchical nature of the [PSoC] PSOC microcontroller architecture is well suited to representation in an XML formatted database, and the XML formatted data is readily available as a direct result of the design activity. The data that serves as the basis for the automatic generation of a datasheet does not require [a] an exceptional overhead or a specialized processor.

Please replace the paragraph beginning at page 24, line 2 with the following:

Figures 5A through 5E [shows] show a visual output datasheet as rendered by a browser. From within an IDE, the visual output may be obtained by simply clicking on an icon (invoking a browser for the datasheet of the current project) or clicking on a datasheet file in a directory (associating the datasheet file type with the browser [application.)] application). Either of these methods is referred to as a "single action datasheet [display"] display."

Please replace the paragraph beginning at page 24, line 16 with the following:

Figure 5A shows a portion of the data provided by interaction with the [Device Editor] configuration interface shown in [figures] Figures 1B through 1E. The Signal Pin Table 503 of Figure 5A is produced from input to the Pinout Window 140 and the Pinout Parameters Window 141 of Figure 1E. Similarly, the Selected Global Parameters table 505 of Figure 5A originate from input provided using Global Resource Window 131 shown in Figure 1D. Other user selected input appears in the Parameters table 507 of Figure 5B and the Pin table 509 of Figure 5D.

Please replace the paragraph beginning at page 25, line 4 with the following:

In addition to the user selected input, the visual output datasheet also includes graphics elements such as the PWM schematic 506 shown in Figure 5B and the 25122PDIP outline 504 in the Signal Pin Table 503 of Figure 5A. Other graphics elements are the logo 500 and icon 502 shown in Figure 5A. Graphics elements may be retrieved on the basis of information referenced in the database, but are not necessarily a part of the database itself. A graphics image such as the "Cypress [Microsystems"] MicroSystems" logo 500 at the top of Figures 5A, 5B and 5D may be inserted by the stylesheet without reference to the XML formatted data.

Please replace the paragraph beginning at page 25, line 16 with the following:

The visual output datasheet also displays information not explicitly input using the [Device Editor] configuration interface, such as the Blocks Table 508 of Figure 5C and the Global Register Values table 513 in Figure 5E. Other data tables that may be included are the Analog Clocks table 510 and Analog Input MUX table 511 of Figure 5D, and the Analog Buffer Output table 512 of Figure 5E. Also shown in Figure 5A is a file information block 501, containing information regarding the generation of the datasheet file.

SUPPORT FOR AMENDMENTS

Support for the amendments herein can be found in the specification as originally filed (e.g., page 1, lines 8-12; page 2, lines 9-12; page 12, lines 16-21; page 13, lines 5-19; and page 21, lines 1-20) and in the related application Ser. No. 10/033,027. The present amendment intends to clarify and/or remove references to trademarks of Cypress MicroSystems, Inc. (see, e.g., M.P.E.P. § 608.01(v) and the attached printouts from http://tess.uspto.gov/, notably the "PSOC" trademark

registration information therein, and http://www.cypressmicro.com/corporate/CY_Announces_nov_13_2000.html). No new matter is introduced.

REMARKS

Claims 1-26 are presented for consideration in the present application, which is now believed to be in condition for examination. Early notice to that effect is earnestly solicited.

Respectfully submitted,

WAGNER, MURABITO & HAO LLP

Anthony C. Murabito
Registration No. 35,295

Andrew D. Fortney, Ph.D.
Registration No. 34,600

Two North Market Street
Third Floor
San Jose, California 95113
(408) 938-9060
ADF/adf